

## Public Health Resources

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SARS showed that Ontario's public health system is broken and needs to be fixed. Evidence of its inadequacy was presented in the Naylor Report, the Walker Report, and the Commission's first interim report.

Since then, as set out in Appendix C, much progress has been made. The government has moved forward by appointing Dr. Sheela Basrur as the new Chief Medical Officer of Health, making legislative changes, and beginning to allocate resources. But despite a promising start, much more remains to be done. After long periods of neglect, inadequate resources and poor leadership, it will take years of sustained funding and resources to correct the damage. Like a large ship, a public health system, especially one as big and complex as Ontario's, cannot turn on a dime.

There is wide agreement on what still needs to be accomplished. But it takes unflinching commitment and determination to rebuild a broken public health system. Without a sustained commitment to fund the necessary changes, much that has been done will wither away and much that is urgently required will never be realized.

SARS focused on the need for public health to do more to protect us against disease, more by way of planning against threats like pandemic influenza, and more by way of increased powers for public health authorities to monitor infectious threats in the community and in health care institutions. It demonstrated that more public health resources are required in many areas, including:

- Laboratory capacity, expertise and personnel;
- Scientific advisory capacity and capabilities;
- Epidemiological expertise;
- Surge capacity;
- Infectious disease expertise and personnel;

- Strengthening public health human resources; and
- Infectious disease information systems.

Naylor, Walker, and this Commission recommended more public health resources to prevent infectious outbreaks before they erupt, and to control them once they start. The government has accepted in principle this need. The problem is that new leadership, legislative changes, reviews and new programmes require continued funding. This underlying need for sustained levels of resources was described by Dr. Donald Low before the Justice Policy Committee:

A clear authority, I think, is number one, as you've heard, and critical; and not only having a clear authority but the resources to back that up. If you don't have those resources, then you really can't take advantage of that authority. Finally, being able to draw on the expertise to support you, whether that expertise comes locally, nationally or from other countries, is critical, especially in a setting such as SARS or pandemic influenza. The problem with dealing with these outbreaks is the sustainability of them. We can handle it for a week, but we can't handle it for two, three, six weeks. We need the expertise.<sup>307</sup>

Some resources have already been allocated to improve the health care system. The Ministry of Health and Long-Term Care, for example, has pledged to implement a federally-funded outbreak management system called the Integrated Public Health Information System or iPHIS. Full deployment in all public health units is expected to be completed by the end of 2005. In another example, the Ministry is creating a permanent central expert body, the Provincial Infectious Disease Advisory Committee, to continue the development of standards and guidelines for health professionals and organizations faced with infectious disease outbreaks.

This is a commendable start, but these measures mark merely the end of the beginning of the effort to fix the public health system. The end will not be reached until Ontario has a public health system with the necessary resources, expertise and capabilities, and this will take years to achieve. The U.S. General Accounting Office, the equivalent of the Auditor General of Canada, has noted that fundamental changes in large institutions can take at least five to seven years:

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307. Justice Policy Committee, Public Hearings, August 18, 2004, p 156.

... change is necessarily a long-term undertaking, requiring leadership and commitment. Experience shows that successful major change management initiatives in large private and public sector organizations can often take at least 5 to 7 years. This length of time and the frequent turnover of political leadership ... have often made it difficult to obtain the sustained and inspired attention to make needed changes.<sup>308</sup>

The difficulty of effecting change over such a long time-line, and the importance of continuing to provide resources to sustain such profound and long-term change, is best exemplified by the problems faced by the Public Health Division in trying to revitalize the Central Public Health Laboratory.

Located in Toronto, the Central Public Health Laboratory is the Ministry of Health and Long-Term Care's key provider of diagnostic microbiology testing. As such, it is supposed to be the primary laboratory in the province supporting outbreak management and control efforts. During an infectious disease outbreak, epidemiologists and clinicians rely on laboratory tests to verify diagnoses, identify the nature and characteristics of the infectious agent, map the extent of an outbreak and gauge the effectiveness of counter-measures. These tests must be completed quickly and efficiently, and the results conveyed to those managing the response to the outbreak in a timely manner.

But, as noted in the SARS Commission's first interim report, the provincial laboratory failed to discharge its responsibilities effectively during SARS. The Commission's first interim report stated:

The capacity of a laboratory system to respond to an outbreak of infectious disease must pre-exist any future outbreak because it is impossible to create it during an outbreak. The functions performed by public health laboratories require the work of highly skilled professionals. This work cannot be done by recruiting inexperienced volunteers during an emergency. Nor is it adequate to rely on the hope that private and hospital laboratories will have the extra capacity when needed. Laboratory capacity is much like the rest of public health; its importance is not appreci-

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308. U.S. General Accounting Office, *Centres for Disease Control and Prevention: Agency Leadership Taking Steps to Improve Management and Planning, but Challenges Remain*, (Washington, D.C.: January 2004), pp. 2-3.

ated, nor the impact of its inadequacies felt, until there is an outbreak and then it is too late.<sup>309</sup>

The Naylor Report noted:

With the provincial lab overwhelmed, some hospitals sent specimens directly to the National Microbiology Laboratory [in Winnipeg] bypassing the usual hierarchy of referral. The Hospital for Sick Children, Mount Sinai and Sunnybrook and Women's had strong polymerase chain reaction [PCR] technology – an elegant laboratory testing modality that identifies micro-organisms. They became the de facto and unfunded referral centres for Toronto SARS testing.<sup>310</sup>

Of particular concern during SARS was the lack of sufficient scientific expertise. When SARS hit, there were only two medical microbiologists employed by the provincial labs. All the PhD level scientists had been laid off two years earlier.

The professional inadequacy of our public health laboratory system during SARS illustrated dramatically the urgent need for sustained resources, without which Ontario will continue to be unprepared for the next outbreak of infectious disease. The sad plight of the public health laboratories provides a cautionary example of what happens when inadequate resources are allocated on a continuing basis to vital elements in our protection against infectious disease.

When the Walker Panel recommended in April 2004 that the Ministry begin establishing a Health Protection and Promotion Agency, it recommended that the Central Public Health Laboratory be one of its core components. The Walker Panel stated:

The ability to provide timely and accurate lab information to those involved in structuring the province's epidemiologic analysis and overseeing the surveillance efforts is key to an effective surveillance system and to a responsive public health system.

In its interim report, the Panel highlighted the need to align the public health laboratory system and the epidemiological and surveillance functions. The Panel also called for immediate short-term action to address the significant shortage of microbiology

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309. Commission's first interim report, p. 96.

310. Naylor Report, p. 33.

expertise and medical leadership at the existing Central Public Health Laboratory:

In looking to the future, the Panel strongly suggests that the province aims to co-locate a revitalized Central Public Health Laboratory with the Agency. This will involve new lab capacity being built over time; Ontario should vigorously pursue this in addition to federal support to assist in it being realized. The Panel also believes that there are tremendous opportunities to develop formalized and much closer linkages between the central laboratory and the laboratory infrastructure at major academic health sciences centres in Ontario. The Ministry should actively seek to retain the focus and vision of the Public Health Laboratory while ensuring that it is part of a formal, broader critical mass of expertise through the appropriate partnerships with lab networks at the federal and provincial levels. A clear hallmark of the effectiveness of the B.C. and Quebec agencies is the co-location of laboratory expertise within the agency structures. Co-location allows for rapid on-site review of emergent issues, and ensures that the perspective of those involved in the testing and laboratory analysis components of surveillance and response are integrally and directly linked to the efforts of an overall team.<sup>311</sup>

The SARS Commission endorsed this thoughtful recommendation, which the Government accepted in June 2004, when it released *Operation Health Protection: An Action Plan to Prevent Threats to our Health and to Promote a Healthy Ontario*. This document stated:

Central to the establishment of the Agency is the modernization of Ontario's Central Public Health Laboratory and the public health laboratory system ... The Agency Implementation Task Force will also guide an operational review of the public health laboratory system to align the available testing services with what is required. This will also help determine the functional and procedural enhancements needed to ensure that the system performs at optimal levels on a daily basis as well as during an outbreak. This review will be completed over the next few months. Formal linkages are already being strengthened and technological infrastructure has recently been created within the Ministry and the Central Public Health Laboratory to improve communication and information exchange.

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311. The Walker Interim Report, p. 97.

Our goal is to ensure a state-of-the-art public health laboratory system in Ontario. In order to strengthen the province's laboratory capacity and to prepare for co-locating appropriate functions of the Central Public Health Laboratory with the Agency, we will enhance the medical capacity of the public health laboratory system, beginning with the addition of a senior medical director and additional medical microbiologists.<sup>312</sup>

Achieving this important goal is no easy matter. The Public Health Division is in the unenviable position of rebuilding a critical institution in the midst of trying to implement short-term solutions to endemic systemic problems. It is like trying to build a new dike while, at the same time, shoring up a crumbling barrier of sand bags.

Take the problem of the lack of professional expertise. While the government has approved recruiting six medical microbiologists and a medical director, and recruitment is well under way, it is difficult and time-consuming to attract the best people to an organization without a record of excellence and, until now, a lack of commitment to excellence. Adding to the difficulty is the fact that medical microbiologists are in high demand across North America. As one official told the Commission:

It's a seller's market.

For such a critical institution as the Central Public Health Laboratory, a recruitment misstep could have long-term consequences

While rebuilding the Central Public Health Lab's professional expertise, the Public Health Division is also facing a more immediate and critical need to keep the Central Public Health Lab functioning. Since SARS, one of the provincial laboratory's two medical microbiologists has left for another position and has not been replaced, and the second microbiologist is on leave. Luckily for the province, Dr. Donald Low, whose spirit of public service during SARS is to be commended, has once again stepped up and has arranged on a temporary basis for a team of microbiologists from Mount Sinai Hospital in Toronto to fill the gap.

Adding to this difficult balancing act, the Public Health Division is also in the process of commissioning experts to conduct a capacity review of the public health laboratory

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312. *Operation Health Protection: An Action Plan to Prevent Threats to our Health and to Promote a Healthy Ontario*, p. 13.

system and determining how it can be effectively integrated into the new Ontario Health Protection and Promotion Agency. Again, this needs to be undertaken with care and prudence, and it takes time.

The reality is, for all the Public Health Division's commendable efforts, and Dr. Low's exemplary assistance, the Central Public Health Lab remains in a difficult state. This is critical when one considers the possible threat of an influenza pandemic and the important role expected of the Central Public Health Lab. As stated in the Ontario Health Pandemic Influenza Plan:

Ontario must have the ability to identify a new strain of influenza virus quickly (prompt identification increases the lead time to develop a vaccine and implement management measures) and to track virus activity. To effectively prepare for and monitor pandemic influenza activity, Ontario must have a rapid, accurate surveillance system, which includes:

- laboratory or virologic surveillance (i.e., isolating and analyzing influenza viruses for their antigenic and genetic properties, definitively diagnosing influenza). This activity is essential to monitor the antigenic drift and shift of influenza viruses circulating among humans. Because the signs and symptoms of influenza are similar to those caused by other respiratory pathogens, laboratory testing is required to definitively diagnose influenza ...<sup>313</sup>

Having regard to the continuing issues faced by the Central Public Health Lab, the Commission recommends, in an effort to mitigate its continuing problems, that it be transferred temporarily to the control of the Chief Medical Officer of Health until it can be integrated into the new Ontario Health Protection and Promotion Agency. Now housed in an area of the Ministry completely separate from the Chief Medical Officer of Health, the Central Public Health Laboratory needs to be under the direction of the Chief Medical Officer of Health to ensure unified leadership and administration of activities that bear directly on our protection against infectious disease.

To its credit, the government recognizes that fixing public health must be done over a period of years. In June 2004, two months after the release of the Commission's first interim report and of the Walker panel's final report, the government unveiled

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313. Ministry of Health and Long-Term Care, *Ontario Health Pandemic Influenza Plan* (May 2004), p. 27.

Operation Health Protection, a three-year plan to fix the weaknesses in the public health system exposed by SARS.

Despite a good beginning, some of the biggest spending lies ahead:

- Establishing the new Ontario Health Protection and Promotion Agency;
- Implementing recommendations of the assessment of the public health laboratory system;
- Integrating the public health laboratory into the new Agency;
- Implementing the recommendations of Capacity Review Committee of local public health;
- Revitalizing the Public Health Division;
- Increasing the provincial share of local public health funding from the current 55 per cent to 75 per cent by January 1, 2007; and
- Funding the increased levels of monitoring, auditing and enforcement outlined in chapter 3 (Municipal Role) of this report.

While many commendable initiatives have been undertaken, a considerable number involve studies, reviews, assessments and planning: a task force to help design and develop the new Ontario Health Protection and Promotion Agency is to make its final recommendations by the fall of 2005; a review on revitalizing the Central Public Health Laboratory and integrating it into the Agency is under way; and a Capacity Review of local public health is to be completed by year's end.

This is not to say that task forces and review committees are unimportant. They are vitally important. Fixing the public health system cannot and should not be done in haste or without care. The point is that it is easier to commit massive funds to a task force than to massive expenditures recommended by a task force. The proof of commitment comes not when the task force is launched, but when its recommendations are ripe for implementation and expenditure.

As the province moves into the latter stages of Operation Health Protection, stages when significant funding will be required, the challenge will be to provide the neces-



sary resources to sustain the momentum for change despite the government's other budgetary pressures.

The point has to be made again and again that resources are essential to give effect to public health reform. Without additional resources, new leadership and new powers will do no good. To give the Chief Medical Officer of Health a new mandate without new resources is to make her powerless to effect the promised changes. As one thoughtful observer told the Commission:

The worst-case scenario is basically to get the obligation to do this and not get the resources to do it. Then the Chief Medical Officer of Health would have a legal duty that she can't exercise.

To arm the public health system with more powers and duties without the necessary resources is to mislead the public and to leave Ontario vulnerable to outbreaks like SARS.